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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/702,619	11/07/2003	Masaki Shimamura	016891-0861	8499

22428 7590 05/26/2005

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EXAMINER

PHAM, TUAN

ART UNIT PAPER NUMBER

2643

DATE MAILED: 05/26/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<p align="center">Office Action Summary</p>	Application No. 10/702,619	Applicant(s) SHIMAMURA, MASAKI	
	Examiner TUAN A. PHAM	Art Unit 2643	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 November 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-33 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-33 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>11/7/03, 4/19/04</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Priority

1. Receipt is acknowledged of papers submitted under 35 U.S.C 119(a)-(d), which papers have been placed of record in the file.

Information Disclosure Statement

2. The information disclosure statement (IDS) submitted on 11/07/2003 and 4/19/2004 has been considered by Examiner and made of record in the application file.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000.

Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

4. Claims 1-4, and 12-14 are rejected under 35 U.S.C. 102(e) as being anticipated by Aotake et al. (U.S. Patent No.: 6,819,942, hereinafter, "Aotake").

Regarding claim 1, Aotake teaches a cellular phone capable of attaching an attachment thereto (see figure 1), comprising: a signal detection unit (read on plug identifying circuit) for detecting a signal intrinsic to the attached attachment (see figure 2, plug identifying circuit 28, col.5, ln.19-28); and a control unit for controlling at least one of a change of setting conditions and an addition of functions of the cellular phone based on the signal (see figure 2, figure 4, control circuit 20, col.6, ln.38-68, col.7, ln.25-50, the control circuit 20 change the condition of mobile phone between earphone mode and flash unit mode).

Regarding claim 2, Aotake further teaches the cellular phone, wherein a type of the attached attachment is identified by the signal (see figure 4, col.6, ln.38-68).

Regarding claim 3, Aotake further teaches the cellular phone, a terminal that transmits/receives a signal to/from the attached attachment; and a power supply terminal that supplies electric power to the attachment (see figure 3, signal input circuit 35, power receiving circuit 33, col.5, ln.60-67).

Regarding claim 4, Aotake further teaches the cellular phone, wherein the setting conditions for the cellular phone of a communication limitation (see figure 1, flash unit FU, col.7, ln.25-50, if the FU is removed from the jack 25, the mobile phone is operated in normal mode).

Regarding claim 12, Aotake further teaches the attachment wherein the cellular phone is of a folding type (it is inherently that the cellular device of Aotake could be a folding type).

Regarding claim 13, Aotake further teaches the cellular phone, wherein the control unit recognizes attachment of the attachment and a type thereof, and executes a control operation after confirming a predetermined entry (see figure 4, col.6, ln.38-67).

Regarding claim 14, Aotake further teaches the cellular phone wherein, when the attachment is detached, the control unit returns the setting conditions for the cellular phone to original ones (see figure 2, plug insertion/removal detection circuit 27, col.5, ln.12-18).

5. **Claims 15-16, 18, 26, and 30-31 are rejected under 35 U.S.C. 102(b) as being anticipated by Hallikainen et al. (U.S. Patent No.: 5,797,102, hereinafter, "Hallikainen").**

Regarding claim 15, Hallikainen teaches an attachment attached to a cellular phone (see figure 4), comprising: a signal output unit (read on processor) which outputs a specific signal corresponding to a type of the attachment (see figure 4, processor, MCU, col.3, ln.23-41); and an output terminal (read on interface of auxiliary device) that outputs the signal to the cellular phone (see figure 4, col.3, ln.23-41).

Regarding claim 16, Hallikainen further teaches the attachment comprising a function unit which performs a predetermined function (see figure 4, functional unit).

Regarding claim 18, Hallikainen further teaches the attachment comprising a control unit that controls the function unit (see figure 4, processor, functional unit).

Regarding claim 26, Hallikainen further teaches the attachment wherein the attachment is engaged onto the cellular phone (see figure 4, cellular interface, auxiliary device 1).

Regarding claim 30, Hallikainen further teaches the attachment wherein the cellular phone is of a folding type (it is inherently that the cellular device of Hallikainen could be a folding type).

Regarding claim 31, Hallikainen further teaches the attachment wherein the specific signal is changeable such that a desired setting condition is set in the cellular phone (see col.3, ln.23-40).

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. **Claims 32-33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hallikainen et al. (U.S. Patent No.: 5,797,102, hereinafter, "Hallikainen") in view of Aotake et al. (U.S. Patent No.: 6,819,942, hereinafter, "Aotake").**

Regarding claim 32, Hallikainen teaches an attachment attached to a cellular phone (see figure 4), comprising: a signal output unit (read on processor) which outputs

a specific signal corresponding to a type of the attachment (see figure 4, processor, MCU, col.3, ln.23-41); and an output terminal (read on interface of auxiliary device) that outputs the signal to the cellular phone (see figure 4, col.3, ln.23-41).

It should be noticed that Hallikainen fails to teach the cellular phone includes a signal detection unit which detects the specific signal outputted by the attachment, and a control unit which controls a change for setting conditions of the cellular phone based on the signal. However, Aotake teaches such features (see figure 2, plug identifying circuit 28, col.5, ln.19-28, figure 4, control circuit 20, col.6, ln.38-68, col.7, ln.25-50, the control circuit 20 change the condition of mobile phone between earphone mode and flash unit mode).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Aotake into view of Hallikainen, in order to allows different auxiliary devices for using the same connector as suggested by Hallikainen at column 1, lines 20-30.

Regarding claim 33, Hallikainen further teaches the cellular phone, wherein the attachment includes a function unit which perform a predetermined function, and the control unit controls at least one of the change for the setting conditions and an addition of functions of the cellular phone (see figure 4, processor, functional unit, col.3, ln.23-46).

8. **Claims 5-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Aotake et al. (U.S. Patent No.: 6,819,942, hereinafter, "Aotake") in view of Newman et al. (Pub. No.: US 2002/0022499, hereinafter, "Newman").**

Regarding claim 5, Aotake teaches a cellular phone capable of attaching an attachment thereto (see figure 1), comprising: a signal detection unit (read on plug identifying circuit) for detecting a signal intrinsic to the attached attachment (see figure 2, plug identifying circuit 28, col.5, ln.19-28); and a control unit for controlling at least one of a change of setting conditions and an addition of functions of the cellular phone based on the signal (see figure 2, figure 4, control circuit 20, col.6, ln.38-68, col.7, ln.25-50, the control circuit 20 change the condition of mobile phone between earphone mode and flash unit mode).

It should be noticed that Aotake fails to teach the cellular phone further comprising a display unit on a back portion. However, Newman teaches such features (see figure 4, back display 19, col.4, [0039]).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Aotake into view of Newman, in order to support a larger display as suggested by Newman at column 1, [0005].

Regarding claim 6, Newman further teaches the cellular phone wherein a back portion attaches the attachment thereto (see figure 4, back display 19, col.4, [0039]).

Regarding claim 7, Newman further teaches the cellular phone wherein the control unit controls the display unit (see figure 4, back display 19, col.4, [0039], it is

obvious that the cellular phone of Newman should be included a controller for controlling the display).

Regarding claim 8, Newman further teaches the cellular phone, wherein the control unit controls a part of the display unit in accordance with a type of the attachment attached to the back portion unit (see figure 4, back display 19, front display 3, figure 3, small display 9, col.4, [0039], it is obvious that the cellular phone of Newman is included a controller for controlling the display 3 and display 9 when that is inserted into the body of the cellular).

Regarding claim 9, Newman further teaches the cellular phone wherein a part of the display unit includes a function of a touch panel, and the control unit controls the touch panel (see col.4, [0028]).

Regarding claim 10, Newman further teaches the cellular phone, wherein the attachment is arranged on at least one of a display unit arrangement surface and an operation unit arrangement surface on a front surface of the cellular phone (see figure 4, back display 19, front display 3, figure 3, small display 9, col.4, [0039]).

Regarding claim 11, Newman further teaches the cellular phone wherein the front surface of the cellular phone includes at least one of a recess portion and a protruding portion for attaching the attachment (see figures 2 and 3, should be included a recess and protruding portion to attach the module 2, 3, 4 together).

9. **Claims 17, 19-20, 27-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hallikainen et al. (U.S. Patent No.: 5,797,102, hereinafter,**

“Hallikainen”) in view of Newman et al. (Pub. No.: US 2002/0022499, hereinafter, **“Newman”**).

Regarding claim 17, Hallikainen teaches an attachment attached to a cellular phone (see figure 4), comprising: a signal output unit (read on processor) which outputs a specific signal corresponding to a type of the attachment (see figure 4, processor, MCU, col.3, ln.23-41); an output terminal (read on interface of auxiliary device) that outputs the signal to the cellular phone (see figure 4, col.3, ln.23-41), and a function unit which performs a predetermined function (see figure 4, functional unit).

It should be noticed that Hallikainen fails to teach the attachment wherein the function unit is a display unit. However, Newman teaches such feature (display 3, col.4, [0036]).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Hallikainen into view of Newman, in order to support a larger display as suggested by Newman at column 1, [0005].

Regarding claim 19, Newman further teaches the cellular phone the cellular phone, wherein the attachment is arranged on at least one of a display unit arrangement surface and an operation unit arrangement surface on a front surface of the cellular phone (see figure 4, back display 19, front display 3, figure 3, small display 9, col.4, [0039]).

Regarding claim 20, Newman further teaches wherein the attachment is arranged on a backside of the cellular phone (see figure 4, display 3 can be attach on the back side of cellular).

Regarding claim 27, Newman further teaches wherein the attachment is fastened to the cellular phone by means of a screw (see figure 4, connector 10, it is obvious that the connector 10 can be replace by a screw).

Regarding claim 28, Newman further teaches wherein each of the attachment and the cellular phone includes any or both of a protruding portion and a recess portion, and the attachment is attached to the cellular phone by inserting the protruding portion into the recess portion (see figures 2 and 3, should be included a recess and protruding portion to attach the module 2, 3, 4 together).

Regarding claim 29, Newman further teaches further comprising a terminal, which receives a supply of electric power from the cellular phone (see figure 7A, display 3, col.4, [0040], display 3 will get power source from the battery 12).

10. **Claims 21-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hallikainen et al. (U.S. Patent No.: 5,797,102, hereinafter, "Hallikainen") in view of Newman et al. (Pub. No.: US 2002/0022499, hereinafter, "Newman") as applied to claim 15 above, and further in view of White et al. (Pub. No.: US 2005/0026643).**

Regarding claim 21, Hallikainen and Newman, in combination, fails to teach a transparent portion of a predetermined shape. However, White teaches such features (see figure 1, window 13, col.2, [0037]).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of White into view of Hallikainen and Newman, in order to provide the user to see through the display.

Regarding claim 22, White further teaches the transparent portion is an opening portion (see figure 1, window 13, col.2, [0037]).

Regarding claim 23, White further teaches a transparent plate is formed in the transparent portion (see figure 1, window 13, col.2, [0037]).

Regarding claim 24, White further teaches the transparent portion is located at a position corresponding to a display unit on a back of the cellular phone (see figure 1, window 13, it is obvious that the window 13 can be placed in the back of cellular).

Regarding claim 25, White further teaches the transparent portion corresponds to a part of the display unit (see figure 1, window 13, col.2, [0037]).

Conclusion

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. In order to expedite the prosecution of this application, the applicants are also requested to consider the following references. Although Harris et al. (U.S. Patent No. 6,118,986), Theobald (U.S. Patent No. 5,859,522), Masutani et al. (Pub. No.: US 2002/0137542), and Tanaka et al. (Pub. No.: US 2003/0007169) are not

Art Unit: 2643

applied into this Office Action; they are also called to Applicants attention. They may be used in future Office Action(s).

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Tuan A. Pham** whose telephone number is (571) 272-8097. The examiner can normally be reached on Monday through Friday, 8:00 AM-5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Curtis Kuntz can be reached on (571) 272-7499 and

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Art Unit 2643
May 17, 2005
Examiner

Tuan Pham


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